

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in this application.

Listing of the Claims:

1. (Currently amended) A process for preparing a nickel(0)-phosphorus ligand complex containing at least one nickel(0) ~~central~~ atom and at least one phosphorus ligand, which comprises reducing a nickel(II) source comprising nickel bromide, nickel iodide or mixtures thereof in the presence of at least one phosphorus ligand selected from the group of mono- or bidentate phosphonites, bidentate phosphites, bidentate phosphines and mono- or bidentate phosphinites.

2. (Currently amended) The process according to claim 1, ~~which is carried out in~~ wherein reducing the nickel(II) source is conducted in the presences of a solvent ~~which is~~ selected from the group consisting of organic nitriles, aromatic or aliphatic hydrocarbons and mixtures thereof.

3. (Currently amended) The process according to claim ~~1 or~~ 2, wherein the concentration of the phosphorus ligand in the solvent is from 1 to 90% by weight, based on the solution.

4. (Currently amended) The process according to ~~any of claims 1 to 3~~ claim 1, wherein ~~the reducing the nickel(II) source comprises metal reducing agents used are metals which~~ that are more electropositive than nickel.

5. (Currently amended) The process according to ~~any of claims 1 to 3~~ claim 1, wherein ~~the reducing the nickel(II) source comprises~~ reducing agents used are selected from the group consisting of metal alkyls, electrical current, complex hydrides and hydrogen.

6. (Currently amended) The process according to ~~any of claims 1 to 5~~ claim 1, wherein the phosphorus ligand ~~stems is obtained~~ is obtained from a ligand solution ~~which has already been that was~~ used as a catalyst solution in hydrocyanation reactions.

7. (Currently amended) The process according to ~~any of claims 1 to 6~~ claim 1, which comprises the following process steps:

(I) preparing a solution or suspension of nickel bromide, nickel iodide or a mixture thereof in a solvent under inert gas,

(II) stirring the solution or suspension ~~stemming from process~~ prepared in step (I) at a precomplexation temperature of from 20 to 120°C and for a precomplexation period of from 1 minute to 24 hours,

(III) adding at least one reducing agent to the solution or suspension ~~stemming from process~~ prepared in step (II) at an addition temperature of from 20 to 120°C[.],

(IV) stirring the suspension or solution from ~~process~~ step (III) for a reaction period of from 20 minutes to 24 hours at a reaction temperature of from 20 to 120°C and

(V) ~~admixing~~ adding a chelate solution[.].

8. (Currently amended) A mixture comprising a nickel(0)-phosphorus ligand complex, obtainable by a process according to ~~any of claims 1 to 7~~ claim 1.

9. (Original) The use of the mixtures comprising nickel(0)-phosphorus ligand complexes according to claim 8 in the hydrocyanation and isomerization of alkenes and in the hydrocyanation and isomerization of unsaturated nitriles.

10. (New) The use of the mixtures comprising nickel(0)-phosphorus ligand complexes according to claim 7 in the hydrocyanation and isomerization of alkenes and in the hydrocyanation and isomerization of unsaturated nitriles.

11. (New) A process for preparing a nickel(0)-phosphorus ligand complex comprising the following steps:

(i) preparing a solution or suspension of nickel bromide, nickel iodide or a mixture thereof in a solvent under inert gas, and stirring the nickel-containing solution or suspension at a precomplexation temperature of from 20 to 120°C for a precomplexation period of from 1 minute to 24 hours; and

(ii) adding at least one reducing agent to the solution or suspension in step (i) at an addition temperature of from 20 to 120°C and adding a chelate solution comprising at least one phosphorus ligand selected from the group of mono- or bidentate phosphonites, bidentate phosphites, bidentate phosphines and mono- or bidentate phosphinites; and

(iii) stirring the resulting suspension or solution from for a reaction period of from 20 minutes to 24 hours at a reaction temperature of from 20 to 120°C.

12. (New) The process according to claim 11, wherein preparing the nickel-containing solution or suspension is conducted in the presence of a solvent selected from the group consisting of organic nitriles, aromatic or aliphatic hydrocarbons and mixtures thereof.

13. (New) The process according to claim 11, wherein the phosphorus ligand is obtained from a ligand solution that was used as a catalyst solution in hydrocyanation reactions.

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16. (New) The process according to claim 1 wherein the nickel source is nickel bromide.

17. (New) The process according to claim 11 wherein the nickel source is nickel bromide.

18. (New) The process according to claim 1 wherein the nickel source is nickel iodide.

19. (New) The process according to claim 11 wherein the nickel source is nickel iodide.